

Image

2823

PTO/SB/21 (08-03)

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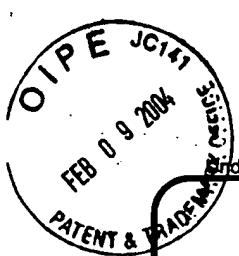
<b>TRANSMITTAL FORM</b> <small>(to be used for all correspondence after initial filing)</small>	Application Number	09/915,093
	Filing Date	07/25/2001
	First Named Inventor	Segal et al.
	Art Unit	2823
	Examiner Name	W. David Coleman
Total Number of Pages in This Submission	Attorney Docket Number	112020.125/NAN-1

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): - Postcard
<b>Remarks</b> 1. Form PTO-1449 (1 page) 2. 12 copies of publications		
<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>		
Firm or Individual name	Emily R. Whelan	
Signature	<i>Emily R Whelan #50,391</i>	
Date	02/06/2004	

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Tina M. Dougal		
Signature	<i>Tina M. Dougal</i>	Date	02/06/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180.00

## Complete if Known

Application Number	09/915,093
Filing Date	07/25/2001
First Named Inventor	Segal et al.
Examiner Name	W. David Coleman
Art Unit	2823
Attorney Docket No.	112020.125/NAN-1

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number  
Deposit  
Account  
Name

08-0219

Hale and Dorr LLP

The Director is authorized to: (check all that apply)

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☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0.00

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =		
Independent Claims	-3** =		
Multiple Dependent		0	0

<u>Large Entity</u>		<u>Small Entity</u>		<u>Fee Description</u>
<u>Fee Code</u>	<u>Fee (\$)</u>	<u>Fee Code</u>	<u>Fee (\$)</u>	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	180.00
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 180.00

## SUBMITTED BY

Name (Print/Type)	Emily R. Whelan	Registration No. (Attorney/Agent)	50,391	Telephone	(617) 526-6000
Signature	Emily R. Whelan	Date	02/06/2004		

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: SEGAL et al.  
Serial No.: 09/915,093 Examiner: W. David Coleman  
Filed: July 25, 2001 Group Art Unit: 2823  
For: ELECTROMECHANICAL MEMORY ARRAY USING NANOTUBE  
RIBBONS AND METHOD FOR MAKING SAME  
Atty. Docket No.: 112020.125/NAN-1

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CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

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Tina M. Dougal

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants and their legal representatives hereby make of record on the attached Form PTO-1449 the following publications which are known to them and considered warranting disclosure under 37 C.F.R. §1.56 and 1.97-98.

Copies of the publications listed on the attached Form PTO-1449 are submitted herewith. It is respectfully requested that the Examiner initial and return a copy of the subject Form PTO-1449 with the next Patent Office communication.

02/11/2004 CCHAU1 00000052 080219 09915093  
01 FC:1806 180.00 DA

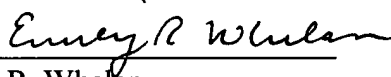
The submission of these publications does not constitute a representation by the Applicants that a search has been made or that no better art exists and does not constitute an admission that the listed publications are material or constitute "prior art." Applicants reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed publications, should one or more of the publications be applied against the claims of the present application.

The Supplemental Information Disclosure Statement is being filed after the mailing date of the first Office Action on the merits, therefore, please charge the fee of \$180.00 for its submission to Deposit Account No. 08-0219

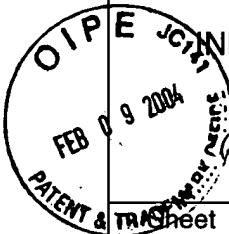
Please charge any fee deficiency or credit any overpayment to Deposit Account No. 08-0219.

Respectfully submitted,

Dated: February 6, 2004

  
\_\_\_\_\_  
Emily R. Whelan  
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Attorney for Applicants

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Subt. For, PTO-1449				Docket Number 112020.125 US1 /NAN-1		Application Number 09/915,093	
 <b>INFORMATION DISCLOSURE IN AN APPLICATION</b> (Use several sheets if necessary)				Applicant <b>SEGAL et al.</b>			
				Filing Date <b>July 25, 2001</b>		Group Art Unit <b>2823</b>	
Sheet	1	OF	1				

U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,973,444	10/26/99	Xu et al.	313	309	
	6,128,214	10/03/00	Keukes et al.	365	151	
	6,159,620	12/12/00	Heath et al.	428	615	

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 00/73204	12/07/2000	PCT				

Other Documents (Including Author, Title, Date, Pertinent Pages, Etc.)		
A1	Dai, Hongjie, "Controlled Chemical Routes to Nanotube Architectures, Physics, and Devices." <i>The Journal of Physical Chemistry B</i> (1999); 103: 11246-11255.	
A2	Homma, Y., et al., "Growth of Suspended Carbon Nanotube Networks on 100nm-Scale Silicon Pillars." <i>Applied Physics Letters</i> (2002); Vol. 81 No. 12, 2261-2263.	
A3	Kong, J., et al., "Syntheses of Individual Single-Walled Carbon Nanotubes on Patterned Wafers." <i>Nature</i> (1998); 395: 878-881.	
A4	Peigney, A., et al., "A Study of the Formation of Single-and-Double-Walled Carbon Nanotubes by a CVD Method." <i>The Journal of Physical Chemistry B</i> (2001); 105: 9699-9710.	
A5	Franklin, N., et al., "Integration of Suspended Carbon Nanotube Arrays into Electronic Devices and Electromechanical Systems." <i>Applied Physics Letters</i> (2002); Vol. 81 No. 5, 913-905.	
A6	Rueckes, T. et al., "Carbon Nanotube-Based Nonvolatile Random Access Memory for Molecular Computing." <i>Science</i> , Vol. 289, 94-97, July 7, 2000.	
A7	Soh et al., "Integrated Nanotube Circuits: Controlled Growth and Ohmic Contacting of Single-walled Carbon Nanotubes." <i>Applied Physics Letters</i> , August 2, 1999, Vol. 75, No. 5, 627-629.	
A8	Snow, E.S. et al., "Random Networks of Carbon Nanotubes as an Electronic Material." <i>Applied Physics Letters</i> , March 31, 2003, Vol. 82, No. 13, 2145-2147.	

EXAMINER	DATE CONSIDERED
<b>EXAMINER:</b> Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not in conformance and not considered. Include copy with next communication to applicant.	